



Mind Your Maintenance

Schools and universities need to manage maintenance effectively to keep operations on track and avoid debilitating breakdowns.

BY MIKE KENNEDY

If stuff never broke down or wore out, managing maintenance in a school facility would be a breeze.

But facilities and equipment don't last forever, and eventually you'll have to replace your old stuff with new stuff.

Eventually? How long is that? Ay, there's the rub, as Shakespeare once said. As long as possible, the budget planners proclaim. But savvy maintenance managers will try to push back against the bean counters and opt for quality over quantity. It's not how

long your stuff lasts, but how long it functions the way it's supposed to.

Keeping buildings and equipment operating effectively for the long term will happen only if schools and universities have an effective program for managing school maintenance.

DEFERRED DREAMS

This is the part of the article where we discuss deferred maintenance, and here we'll pause for all the educators and administrators to roll their eyes and mouth, "not again!" That's

because everyone has read and heard plenty about how humongous the problem is and how essential it is to do something about it. The solution could be as simple as following the advice of the wise folks at Nike: "Just Do It."

But somehow, schools are expected to do it without adequate resources, like running a race with one shoe that has no laces. So, on campus after campus across the county, maintenance jobs are judged to fall just short of the "critical" threshold and



are put at the bottom of the pile by the paper pushers who decide where money is spent.

When that happens, thousands of times, year after year at nearly every school district and higher-education institution, it doesn't strain the imagination to learn that the amount of deferred maintenance in U.S. school facilities is measured in numbers typically associated with Defense Department contracts.

Administrators aren't holding their breaths waiting for legislators to appropriate the hundreds of billions of dollars needed to complete the work that would restore all school facilities to good condition. But they can put maintenance management programs in place that use the resources they are given to the greatest effect.

PREVENT DEFENSE

The most effective maintenance programs emphasize steps that address problems before they become impossible or too costly to fix.

"The primary strategy is to move from the reactive, breakdown maintenance approach to a preventive and predictive model," says a report from the Council of the Great City Schools, "Reversing the Cycle of Deterioration in the Nation's Public School Buildings."

The report from the council's Deferred Maintenance Task Force is one of the latest efforts to bring attention to the need for better maintenance of school facilities. It also offers schools guidance on establishing a maintenance program that emphasizes preventive maintenance.

"Preventive maintenance aims to maintain equipment in optimal condition, reduce the risk of system breakdowns and emergency repairs, and optimize the operating costs," the report says.

Schools should strive to incorporate these elements into a preventive maintenance program, the council recommends:

- **Commitment of executive leadership.** Budget decisions should be

prioritized with the understanding that the cost of fixing problems exacerbated by inadequate maintenance is several times greater than the investing in preventive maintenance.

- **Commitment of maintenance and operations staff.** All service managers, supervisors, technicians, and support personnel must take part in the plan.
- **Subject matter expertise.** The maintenance department must have comprehensive knowledge of equipment. School systems must adequately fund training and continuing education.
- **Commitment to a schedule.** To be effective, preventive maintenance must be carried out on a reliable schedule.
- **Staff specifically assigned to preventive maintenance.** Adequate resources are needed to maintain a preventive maintenance schedule against competing priorities.
- **Tracking and reporting.** Schools need to gather data to measure and assess results.



The council also recommends that schools enhance their maintenance management with aids such as Computer Aided Facilities Management and Computerized Maintenance Management Systems.

"The data produced by these systems provide the district with an understanding of its particular portfolio of facilities and help it make data-supported decisions or recommendations," the report says.

Among the consequences of failing to adopt preventive maintenance strategies:

- Interference with learning and teaching because of service interruptions.
- Damage to collateral systems or spaces, such as mold and mildew.
- Possible voiding of systems and equipment warranties.
- Increased labor costs to maintain equipment as failures compound.
- Reduced labor productivity and

frustration because of recurring equipment failures.

- Possibility of facility being deemed unsafe for occupancy if life safety systems or indoor air quality (IAQ) are compromised.

Schools that commit to an emphasis on preventive maintenance may not see results immediately, but the report asserts that the benefits will materialize for those patient enough to see the plan through.

"It typically takes two to three years from beginning a [preventive maintenance] program to realize the savings," the report says. "Not every school district will experience... dramatic... improvements, but it is a given that an increase in [preventive maintenance] work will result in a downswing of reactive work and costs of that work." ■

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MIS-MANAGED MAINTENANCE

The Broward County (Fla.) district has plans to lay off nine employees in its facilities department while creating 16 new positions next year to help oversee an \$800 million bond program approved last year by voters.

The South Florida Sun-Sentinel reports that the proposed changes come two years after the district carried out a massive housecleaning of the facilities department in response to mismanagement and waste — 45 of the department's 70 employees were let go.

District officials say the latest changes will enable the department to manage future bond projects that will be outsourced to private companies.

The plan eliminates the need for project managers and executive director. Three directors will be hired to oversee pre-construction, construction and overall program controls. Managers under each director will have technical expertise in specific areas. Other maintenance and safety positions will also be added.

In November, voters approved an \$800 million bond proposal that will provide funds to repair and renovate aging facilities in the 265,000-student district.

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